BEFORE THE CORPORATION COMMISSION
OF THE STATE OF OKLAHOMA

Application of Joyce E. Davidson, Director of the Public Utilities Division, Oklahoma Corporation Commission, To Initiate a Proceeding for the Implementation of the Federal Communications Commission's Triennial Review Order

CAUSE NO. PUD 200300646

Track 1 – Local Circuit Switching for the Mass Market

PREFILED TESTIMONY

OF

MARILYN ANDERSON

REDACTED

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I. Introduction

Q: Please state your name and business address.

A: My name is Marilyn Anderson, and my business address is 580 Jim Thorpe Office Building, Oklahoma City, Oklahoma, 73105.

Q: By whom are you employed and in what capacity?

A: I am employed by the Oklahoma Corporation Commission ("OCC" or "the Commission") as a Public Utility Regulatory Analyst in the Telecommunications Group of the Public Utility Division ("PUD").

Q: Please provide a brief resume of your educational background.

A: I graduated in May 1998, from the University of Central Oklahoma with a Bachelor of Science degree in Economics. In addition, I have completed twelve hours of graduate study in Political and Economic Analysis and completed the Annual Regulatory Studies Program in association with the Interstate Association of Regulated Utility Commissioners ("NARUC") at Michigan State University.

Q: Are you a member of any professional organizations or committees?

A: Yes. I am a member of the Interstate Association of Business Economists.

Q: Have you previously appeared as a witness before this Commission and have your credentials as an expert witness been accepted by the OCC?

A: Yes.

II. Purpose

Q: What is the purpose of your testimony?

A: The purpose of my testimony is to make a recommendation on behalf of Staff in the Application of Joyce E. Davidson, Director of the Public Utilities Division, Oklahoma Corporation Commission, To Initiate a Proceeding for the Implementation of the Federal Communications Commission's Triennial Review Order ("TRO"). Specifically, my testimony relates to Track 1 – Unbundled Local Switching ("ULS") for the Mass Market. My testimony discusses Staff's recommendation on geographic markets and the appropriate cut-off point between mass market and enterprise customers, which were used in the impairment analysis. My testimony focuses on the question of whether competitive local exchange carriers ("CLECs") are impaired without access to unbundled local switching, when serving the mass market in Oklahoma. Staff's assessment includes trigger analysis, as well as potential economic and operational barrier analysis.

III. Geographic Market Definition

Q: What direction did the TRO give to state commissions with regard to defining the appropriate geographic markets for evaluating impairment?

A: The TRO gave state commissions the discretion to determine the relevant geographic area to include in each market. Specifically, the FCC stated, "State commissions must define each market on a granular level, and in doing so they must take into consideration the locations of customers actually being served (if any) by competitors, and competitors' ability to target and serve specific markets economically and efficiently using currently available technologies."[1] The FCC added, "States should not define the market so narrowly that a competitor serving that market alone would not be able to take advantage of available scale and scope economies from serving a wider market."[2]

Q: What method did Staff use to determine the relevant geographic markets for evaluating impairment?

[1] TRO ¶495.
[2] *Id*.

A: First, Staff identified the locations, by wire center, where customers were actually being served by CLECs with self-provisioned switches, then plotted the locations on a map. Using the map as a guide, Staff determined the appropriate geographic markets, based on the most granular level that would still allow competitors to take advantage of available scale and scope economies.

Q: What is Staff's position regarding the appropriate geographic markets for examining impairment of ULS in Oklahoma?

A: It is Staff's position that each incumbent local exchange carrier ("ILEC") exchange is the appropriate geographic market for examining impairment of ULS in Oklahoma.

Q: Please define the term exchange.

A: OAC 165:55-1-4 defines exchange as a "geographic area established by an incumbent LEC as filed with and/or approved by the Commission for the administration of local telecommunications services in a specified area which usually embraces a city, town, or village and its environs. It may consist of one or more central offices together with associated plant used in furnishing telecommunications service in that area."

Q: Has this Commission previously used the exchange as an appropriate geographic area for the evaluation of competition?

A: Yes. When this Commission established the rules for alternative regulation (Oklahoma Plan), it included a competitive test, designed to determine whether a particular service should be granted additional pricing flexibility. OAC 165:55-1-4 defines the competitive test as "an evaluation by the Commission to determine after notice and hearing, for a particular service on an **exchange** by **exchange** basis, the existence of competition among an ILEC, a non-affiliated facilities based Competitive Provider, and one (1) other non-affiliated Competitive Provider. Such **exchanges** shall be the same as those on file with the Commission on the date of approval of the transition Plan." Defining the relevant market on an exchange basis for this proceeding is consistent with the Commission's prior approach for determining the level of competition for a particular service.

Q: Is defining geographic markets on an exchange basis consistent with the FCC's directives in the TRO?

A: Yes. The exchange level is granular enough to effectively consider the criteria identified by the FCC, while still broad enough to examine the scale and scope economies available to CLECs serving areas larger than a single wire center. In giving direction to the states on defining markets, the FCC recognized that many states have already defined certain geographic markets for purposes such as retail ratemaking and UNE rate zones. According to the FCC, if a state determines that these already-defined markets would be appropriate to use in this proceeding, it may use these market definitions.[3]

Q: Has Staff reviewed the testimony filed by the parties in this cause, with respect to the appropriate geographic market definition for examining local circuit switching impairment in Oklahoma's local exchange markets?

A: Yes. Staff has reviewed the testimony related to geographic market definition filed in this cause by SBC's witnesses Gary Fleming and Tim Tardiff, AT&T's witness James Prieger, and August Ankum on behalf of MCImetro, Brooks Fiber and Intermedia ("MCI").

Q: Please summarize the various proposals presented by the parties.

A: Both of SBC's witnesses, Gary Fleming and Tim Tardiff, proposed the MSA/WACP as the appropriate geographic markets for mass market switching impairment analysis in Oklahoma. AT&T's witness, Mr. Prieger, suggested that the MSA/WACP is too large, and the fact that CLECs were not serving customers throughout the entire MSA/WACP with their own switching facilities indicates that it is uneconomic to do so.[4] MCI's witness, Ms. Ankum, recommended defining the geographic market at the incumbent wire center level. Ms. Ankum based her recommendation on the fact that it is within a wire center that competitors must access unbundled loops via collocation. Ms. Ankum also argued that CLECs make entry decisions at the wire

[3] TRO ¶ 496.

[4] Direct Testimony Prieger, March 22, 2004, p.45.

center level since the costs to interconnect are incurred on a wire center-by-wire center basis.[5]

Q: After reviewing the testimony filed by the parties, does Staff still take the position that it is most appropriate to define the markets for impairment analysis at the exchange level?

A: Yes. The geographic locations where CLECs have actually provisioned their own switching are centralized in the Oklahoma City and Tulsa metropolitan areas. The Oklahoma City and Tulsa MSA/WACPs encompass very large regions, much of which is outside the metropolitan areas where there is little, if any, facility-based competition. Although Staff collected data at the wire center level, it is Staff's position that the wire center is too granular for a competitor serving a single wire center to take advantage of economies of scale and scope. It is Staff's position that a competitor would be able to take advantage of economies of scale and scope when providing service throughout an entire exchange.

IV. Mass Market Cut-Off

Q: What was the FCC's intent in the TRO when it directed state commissions to determine the appropriate cut-off for multi-line DS0 customers?

A: It is Staff's understanding that the FCC intended for state commissions to determine the difference between the mass market and the enterprise market. The mass market cutoff is a means of differentiating enterprise customers from mass market customers. In the TRO, the FCC defined mass market customers as "analog voice customers that purchase only a limited number of POTS lines, and can only be economically served via DS0 loops."[6] The FCC clarified that POTS lines (DS0 loops) were used by both residential and very small business customers.[7] The FCC defined DS1 enterprise customers as "customers for which it is economically feasible for a competing carrier to provide voice service with its own switch using a DS1 or above

[5] Direct Testimony Ankum, March 22, 2004, p.41.
[6] TRO ¶ 497.
[7] *Id*.

loop."[8] State commissions were instructed to consider the point where it makes economic sense for a multi-line DS0 customer to be served via a DS1 loop."[9] This is referred to as the crossover point.

Q: What method did Staff use to determine the appropriate DS0/DS1 crossover point?

A: Staff reviewed the testimony submitted by the parties, which included detailed analysis of the costs associated with serving a customer via multiple DS0s, versus the costs associated with serving a customer via a DS1. Total costs include both recurring and non-recurring costs. Staff reviewed the rates and assumptions used in the analyses for reasonableness. After reviewing the evidence presented by the parties, Staff recommends ten lines as the appropriate DS0/DS1 crossover point in Oklahoma.

Q: Is Staff's recommendation of ten lines in agreement with the testimony filed by the parties in this cause?

A: No.

Q: Please summarize the parties' positions on this issue.

A: Staff has reviewed the testimony filed in this cause by SBC's witnesses, Gary Fleming, MCI's witness, August Ankum, and AT&T's witnesses, Robert Flappan and Daniel Rhinehart. The parties have taken several different positions in recommending an appropriate crossover point.

SBC recommended a crossover point of four lines.[10] Mr. Fleming attempted to demonstrate that such an approach is justifiable, provided that CLECs are able to generate sufficient revenues from the sale of additional data services to their customers.

AT&T recommended a crossover point of sixteen lines.[11] Robert Flappan and Daniel Rhinehart provided a detailed analysis to support AT&T's position.

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[8] TRO footnote 1296.
[9] TRO ¶ 497.
[10] Direct Testimony Fleming, February 11, 2004, p.45.
[11] Direct Testimony Flappan & Rhinehart, March 22, 2004, p.49.

MCI's witness, Ms. Ankum, provided a detailed study advocating an Oklahoma statewide crossover point of nine lines.[12]

Q: Why does Staff not agree with the positions presented by the parties?

A: Staff does not agree with SBC's position, which requires CLECs to generate additional revenues from the sale of data services to recover the additional cost of a DS1, as compared to the cost of four DS0s. SBC made the assumption that every customer with four or more lines will always purchase additional data services, which warrant the acquisition of a DS1. The FCC made clear that the cut-off point was the point where it was economically feasible for a competing carrier to provide **voice** service with its own switch using a DS1 or above loop.[13]

Staff did not consider the study presented by AT&T's witnesses, Mr. Flappan and Mr. Rhinehart, because they did not provide adequate Oklahoma-specific documentation to support their analysis.

Staff agrees with the analysis presented by Ms. Ankum, with the exception of the calculation of the statewide crossover point. It is Staff's position that a more appropriate statewide crossover point would be calculated using a weighted average to reflect the number of access lines in each UNE Rate Zone, rather than using a simple average as employed by Ms. Ankum.

Q: What is Staff's position regarding determination of the appropriate DS0/DS1 crossover point?

A: It is Staff's position that the most accurate statewide crossover point would be a weighted average, calculated based on the number of access lines in each UNE Rate Zone. Staff was not able to obtain a current count of the access lines in each UNE Rate Zone, but recent estimates indicate that a statewide, weighted average crossover point would be between ten and eleven lines. Therefore, it is Staff's position that, at a minimum, the appropriate DS0/DS1 crossover point in Oklahoma should be ten lines. Customers with less than ten lines should be included in the mass market, and customers with ten lines and above should be included in the enterprise market.

[12] Direct Testimony Ankum, March 22, 2004, p.96.
[13] TRO, footnote 1296.

Q: Does Staff have any other basis for determining the appropriate DS0/DS1 crossover point should be ten lines?

A: Yes. SBC's marketing department distinguishes small business customers as businesses that use up to ten lines. For example, SBC Business Unlimited is only available to business customers with 1–10 lines.[14] In the 2001 rulemaking, SBC proposed OAC 165:55-9-8, distinguishing business end-users having ten or more access lines from residential end-users and business end-users with less than 10 access lines. It is clear that SBC has made the distinction between small and large business customers at the ten-line level, which further supports Staff's position.

V. Impairment Analysis

Q: How did Staff conduct its impairment analysis in this proceeding?

A: Staff conducted its impairment analysis in this proceeding in an objective manner and in accordance with the directives of the FCC, as specified in the TRO.

Q: What specifically did the FCC direct state commissions to do?

A: The FCC directed state commissions to conduct a granular review, on a market-by-market basis, to evaluate local market conditions and determine if CLECs would be impaired without access to unbundled local circuit switching when serving mass market customers.[15] State commissions were directed to follow a two-step process to determine whether impairment exists in a particular market.[16]

Q: Please explain the FCC's two-step process.

A: For the first step of the process, the FCC adopted triggers as a principal mechanism for use by states in evaluating impairment. The triggers were designed to identify markets where multiple CLECs are using their own switches to serve mass market customers or to provide wholesale switching to other carriers.[17]

Q: Please describe the FCC's triggers.

[14] Southwestern Bell Communications Services, Inc. Voice Product Reference and Pricing Guidebook, Section 3.7.48.
[15] TRO ¶ 493.
[16] TRO ¶ 494.

A: The FCC identified two triggers, the self-provisioning trigger and the competitive wholesale facilities trigger. The self-provisioning trigger requires the state commission to make a finding of "no impairment" in a particular market when three or more unaffiliated competing carriers are serving mass market customers with their own switches.[18] The competitive wholesale facilities trigger requires the state commission to make a finding of "no impairment" in a particular market when two or more carriers, not affiliated with each other or the ILEC, are using their own switch to provide wholesale switching service.[19] If the triggers are satisfied, state commissions are not obligated to undertake any further inquiry because no impairment should exist in that market. If the triggers are not satisfied, the state commission must proceed to the second step of the analysis.[20]

Q: What is involved in the second step of the analysis?

A: In the second step of the analysis, state commissions "must evaluate certain operational and economic criteria to determine whether conditions in the market are actually conducive to competitive entry, and whether carriers in that market actually are not impaired without access to unbundled local circuit switching."[21]

Q: If the Commission were to determine that the self-provisioning trigger had been met, and there was no impairment in a particular market, what affect would that decision have on the way ILECs and CLECs do business in Oklahoma?

A: If the Commission finds that there is no impairment in a particular market, the ILEC would no longer be obligated to provide unbundled switching, or the unbundled network element platform ("UNE-P") in that market. CLECs that are currently using UNE-P would be required to purchase their own switching facilities and provision local service utilizing the unbundled network element loop ("UNE-L").

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[17] TRO ¶ 498.
[18] TRO ¶ 501.
[19] TRO ¶ 504.
[20] TRO ¶ 494.
[21] *Id.*

Q: How did Staff obtain the information necessary to perform its impairment analysis?

A: Staff issued data requests to all ILECs operating in Oklahoma to determine which ILECs were currently providing ULS to CLECs. Staff asked the ILECs to identify locations, by wire center, where they believed the "local switching triggers" had been met.

Q: Did the ILECs provide the information necessary for Staff to perform its impairment analysis?

A: Responses to Staff's data requests revealed that SBC was the only ILEC in Oklahoma challenging the FCC's national finding that CLECs are impaired without access to ULS when serving the mass market. Because SBC challenged the FCC's impairment finding, it was SBC's responsibility to provide the necessary data to demonstrate non-impairment. SBC identified, on a wire center level, the locations were it believes specific CLECs are serving the mass market with their own switches. Staff issued data requests to those CLECs identified by SBC to verify SBC's assessment and to obtain additional information. With the information provided by SBC and the CLECs, Staff was able to identify the locations, by wire center, where CLECs are currently serving the mass market with their own switches.

Q: Has Staff reviewed the testimony filed by the parties in this cause, with respect to whether or not CLECs are impaired without access to unbundled local switching when serving mass market consumers?

A: Yes. Staff reviewed testimony filed by SBC witness, Gary Fleming, MCI witnesses, Rick Whisamore, August Ankum and Michael Starkey, and AT&T witnesses, James Prieger, Sean Minter, Robert Flappan and Daniel Rhinehart.

Q: What was SBC's position with respect to the FCC's finding of impairment, and application of the FCC's triggers?

A: Testimony filed by SBC witness, Gary Fleming, indicated that SBC is seeking relief from the requirement to unbundle local circuit switching under the FCC's self-provisioning trigger in the Oklahoma City and Tulsa MSA/WACPs. As stated earlier,

SBC has proposed the MSA/WACPs as the appropriate geographic markets for determining impairment. SBC identified four CLECs in the Oklahoma City MSA/WACP and three CLECs in the Tulsa MSA/WACP that they believe are serving mass market customers with self-provisioned switches. Mr. Fleming stated in his testimony that SBC is not seeking relief from unbundling under the FCC's wholesale facilities trigger.

Q: Did the other parties filing testimony agree with SBC's position?

A: No. All of the other parties dispute SBC's position that the self-provisioning trigger has been met.

Q: Please summarize the parties' positions?

A: AT&T witnesses, Mr. Flappan and Mr. Rhinehart, claim that CLECs have a significant cost disadvantage, as compared to the ILEC, when providing the same service. They estimate the cost disadvantage at approximately $12 per line per month.[22] AT&T also asserts that CLECs face substantial operational and economic entry barriers when they seek to offer service to mass market customers using their own switches and UNE-L. The primary barriers to entry claimed by AT&T are the costs to backhaul UNE-L traffic from the customer's serving ILEC wire center to the CLEC switch, and the cost of hot cuts to provision the migration of service to the CLEC switch. AT&T argues that the magnitude of these costs should result in a finding of impairment throughout Oklahoma.[23] AT&T's witness, Mr. Minter, advocates applying a set of five tests to evaluate whether a CLEC satisfies a trigger. Test 1 would determine whether the CLEC is unaffiliated with the ILEC or other CLECs identified as satisfying the trigger. Test 2 would determine whether the CLEC is actively providing basic voice service to mass market customers using non-ILEC switching. Test 3 would determine whether the CLEC is offering service throughout the specified geographic market. Test 4 would determine whether the CLEC is serving more than a *de minimis* number of mass market voice customers using non-ILEC switching. Test 5 would determine if the CLEC is likely to continue to actively serve mass market customers using non-ILEC switching.[24] Mr. Minter summed up his

[22] Direct Testimony Flappan & Rhinehart, March 22, 2004, p.39
[23] Direct Testimony Flappan & Rhinehart, March 22, 2004, p.42.
[24] Direct Testimony Minter, March 24, 2004, p.7.

testimony by stating that, "based on the data already available and reviewed, the triggers are not met in any of the geographic areas identified."[25]

MCI witnesses, Michael Starkey and Rick Whisamore, explain the numerous operational aspects of UNE-L that contribute to the impairment faced by CLECs absent access to ULS. Mr. Starkey claims that MCI is impaired throughout Oklahoma without access to ULS and UNE-P.[26] Mr. Whisamore's testimony discusses the coordination, database, and ordering issues that characterize the operational barriers negatively affecting customers, and preventing UNE-L from being a viable option today for the mass market.[27]

Q: Based on the information provided by the parties, was Staff able to perform an impairment analysis, consistent with the directives in the TRO?

A: Yes. Staff was able to collect sufficient data to perform the trigger analysis, as well as analysis of potential operational and economic barriers associated with the use of competitive switching facilities.

Q: After analyzing all of these factors together, was Staff able to find any Oklahoma market where there was "non-impairment"?

A: No. Staff's analysis revealed that the self-provisioning trigger was not met in any market in Oklahoma and that CLECs are impaired without access to unbundled local circuit switching when serving mass market customers in Oklahoma.

Q: If Staff had used the MSA/WACP as the geographic market area, instead of the exchange, would the self-provisioning trigger have been met?

A: No, the results would have been the same.

Q: Please explain.

A: SBC identified four CLECs in the Oklahoma City MSA/WACP, MCI, Cox, Logix and NuVox, that they believed satisfied the self-provisioning trigger. Based on information obtained and verified by Staff, only one of the four identified CLECs, [redacted], is actually serving mass market customers with its own switching. [redacted]

[25] *Id.*, p.16.
[26] Direct Testimony Starkey, March 22, 2004, p.3.

[redacted]. Two of the other identified CLECs, [redacted], serve only enterprise customers, and the fourth identified CLEC, [redacted], provides service to mass market customers via ILEC switching (UNE-P) only.

SBC identified three CLECs, MCI, NuVox and Xspedius, as having satisfied the self-provisioning trigger in the Tulsa MSA/WACP. Based on information obtained and verified by Staff, none of the three identified CLECs is providing voice service to mass market customers with non-ILEC switching. Staff confirmed that one of the identified CLECs, [redacted], provides service to mass market customers at the DS0 level, but with ILEC switching, not self-provisioned switching. Another identified CLEC, [redacted], provisions a limited number of DS0s, but only supplementary to their core enterprise customer service. The third identified CLEC, [redacted], does not provision any DS0s.

As a result, the self-provisioning trigger would not have been met in any market regardless of the market definition.

Q: Since Staff has determined that the self-provisioning trigger has not been met in any Oklahoma market, did Staff evaluate certain operational and economic criteria to determine whether conditions in the market are actually conducive to competitive entry, and whether carriers in that market actually are not impaired without access to unbundled local circuit switching?

A: Yes. Staff collected information from CLECs relating to the costs associated with providing voice service to mass market customers in Oklahoma. The information was provided in responses to data requests, as well as testimony filed by the parties. The data show that when it comes to serving residential and small business customers (mass market) in Oklahoma, CLECs cannot compete equitably with SBC unless they have access to UNE-P. The testimony filed by the CLEC parties in this proceeding details the complex technical issues involved in transitioning carriers from existing UNE-P arrangements to UNE-L. AT&T claims "because the CLEC does not have the economies of scale to directly connect their switch with efficient inter-office trunk groups to each of the ILEC's local switches, the CLEC will be more reliant on the ILEC's tandem network for the exchange of traffic.

[27] Direct Testimony Whisamore, March 22, 2004, p.35.

This reliance puts the CLEC at a cost disadvantage because of the additional tandem switching costs and transport facilities that are needed to complete each of its calls."[28] AT&T goes on to discuss the various cost disadvantages CLECs would experience in the absence of UNE-P, such as collocation, backhaul, and hot cuts. The FCC based its impairment finding largely on evidence regarding the economic and operational barriers caused by the hot cut process. According to the FCC, these barriers include the non-recurring costs, the potential for disruption of service to the customer, and the ILEC's inability to handle the necessary volume of hot cuts in the absence of unbundled switching.[29]

Q: What is the hot cut process?

A: The hot cut process is the physical procedure of transferring a customer's line from the ILEC's switch to the CLEC's switch. The FCC directed state commissions to implement an efficient batch hot cut process that would reduce per-line hot cut costs.[30] Oklahoma's implementation of a batch hot cut process is detailed further in the testimony of Staff witness, Barbara Mallett.

Q: Besides the hot cut process, did Staff identify any other operational or economic barriers to using UNE-L?

A: Yes. In addition to the costs associated with the hot cut process, the costs of backhaul could also be a significant economic barrier to using UNE-L. It is Staff's position that the existing processes and procedures in place for UNE-L would most likely cause customers to experience a delay or loss of service when switching carriers.

Q: Please explain.

A: The UNE-L migration process in place today is highly manual and labor intensive. There are multiple databases such as E911, LIDB, Directory Assistance & Directory Listings, etc., that must be updated for migration from a UNE-P to a UNE-L environment. It is critical that these transfers of information be coordinated seamlessly between providers. According to testimony filed by MCI, "a lack of

[28] Direct Testimony Flappan and Rhinehardt, March 22, 2004, p.36.
[29] TRO ¶ 459.
[30] TRO ¶ 460.

coordination could result in errors in customer records, the loss of customer data, and loss of dial tone."[31]

Q: Was the FCC concerned about the affect the UNE-L migration process might have on customers?

A: Yes. The FCC stated, "The most critical aspect of any industry-wide transition plan is to avoid significant disruption to the existing customer base served via unbundled local circuit switching so that consumers will continue to have access to their telecommunications service."[32]

VI. Recommendation

Q: Please summarize Staff's recommendation.

A: Staff recommends the exchange as the appropriate geographic market for determining whether CLECs are impaired without access to ULS. Staff recommends ten lines as the mass market crossover point; business customers with ten or more lines should be considered part of the enterprise market. Finally, Staff recommends that the Commission find that CLECs are impaired without access to SBC's unbundled local circuit switching when serving the mass market in Oklahoma.

Q: Does this conclude your testimony?

A: Yes, it does.

[31] Direct Testimony Whisamore, March 22, 2004, p.52.
[32] TRO ¶ 529.